



EPA Region 5 Records Ctr.



257452

March 10, 2006

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Sites Area I - January 21, 1999 Administrative Order by Consent (AOC)
Monthly Report February 1 – February 28, 2006**

Dear Mr. Fayoumi,

Enclosed is the Sauget Sites Area I Monthly Report for the February 2006 reporting period. This submittal is in fulfillment of the monthly requirements of Section 2.4 Reporting, of the January 21, 1999 Final Administrative Order by Consent for Sauget Sites Area I, Sauget and Cahokia, Illinois.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven D. Smith". The signature is fluid and stylized, with a large, sweeping "S" and "D".

Steven D. Smith
Project Coordinator

cc: Kevin Turner – USEPA
Tim Gouger - USACE
Sandra Bron - IEPA
Dave Webb - IDPH
Mike Coffey - USF&W
Richard Williams - Solutia
Cathleen Bumb - Solutia
Mayor Frank Bergman - Cahokia, IL
Village of Sauget - c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor R. Sauget - Sauget, IL
L. Glen Kurowski - Monsanto
Linda Tape - Husch & Eppenberger

Sauget Sites Area I - Sauget, Illinois

AOC - EECA / RIFS

Status Report

Date of Report: March 10, 2006
Period Covered: February 1, 2006 - February 28, 2006

Work Performed during the Reporting Period

DNAPL Investigation

Results of field work on a DNAPL investigation that began on May 10, 2004 and was completed on October 30, 2004, were presented in a report submitted to the Agency on January 21, 2005. Based on these results, it was agreed that additional DNAPL investigation was warranted and such investigation began on September 16th and was completed by the end of December 2005. A supplemental DNAPL report was submitted to the Agency on January 6, 2006.

At a meeting held on January 11, 2006, the results of the additional DNAPL investigation was discussed with the Agency. It was noted that the only location at which potentially recoverable quantities of DNAPL were encountered was at BR-I on Site I. The Agency requested that the potential for removal of pooled DNAPL in this well be evaluated. However, due to an apparent obstruction in the well immediately below the bottom of the casing, this obstruction will have to be removed first before pumping can commence. A Work Plan was prepared that describes how the obstruction will be removed and proposes a procedure for attempting any pooled DNAPL recovery. That Work Plan was submitted on March 3, 2006.

EE/CA and RI/FS Report

At a meeting held on July 20, 2005, the Agency indicated its desire to proceed with the source control portion of the Area 1 remedy, if possible, and defer the groundwater portion of the remedy until a regional groundwater model for the Sauget area has been developed. It was agreed that regular working meetings would be held to define the various elements of a source control remedy for Area 1 so that the EE/CA report could be finalized.

Based on the discussion at this meeting, the source control issues that need to be addressed are the following

- Necessity of leachate collection;
- Risks of potential migration of soil vapors into indoor air; and
- Principal threat material review and analysis.

A number of Technical Memoranda (TM) and drawings have been prepared and submitted to the Agency for review over the last year. These include the following:

- A TM comparing the potential impacts to groundwater from mass flux through the source areas with those from DNAPL dissolution. That TM has been accepted by the Agency and a final version was submitted to the Agency in January 2006. It concluded that the groundwater impacts from leachate flowing through the waste are very small in comparison to those from DNAPL dissolution.
- A TM was submitted on October 20th, 2005, summarizing the risks to a recreational child in Dead Creek. The TM concluded that the risks were well below any level of concern. The Agency has asked that this report be updated to conform to recent EPA guidance changes. Some additional information has been requested from the Agency and the TM will be revised as soon as that information has been received.
- A TM was submitted on October 20th, 2006, summarizing the results of the Johnson and Ettinger modeling of potential vapor intrusion into occupied buildings adjacent to the disposal sites. Based on this model, additional soil gas sampling is proposed in the vicinity of these buildings and a Sampling and Analysis Plan was submitted to the Agency on March 3, 2006.
- A TM was submitted on January 4th, 2006 containing the evaluation of the available source characterization data. This evaluation is intended to identify any areas of potential principal threat wastes in the disposal areas. At the last meeting on January 11th, it was agreed that the evaluation indicated that no intact drums are present in the disposal areas. This is to be confirmed by a review of historical aerial photographs. It was also agreed that the On Scene Coordinator's (OSC) report for a removal action carried out by the Agency at Site G will be reviewed to obtain analytical data to evaluate whether particular areas identified in the report contain principal threat wastes.
- A Sampling Plan for evaluating the potential for cadmium to leach from vadoze zone soils to groundwater was submitted on October 12th, 2005. It was proposed that soil samples collected in accordance with the plan would be analyzed for pH and extractable cadmium using the TCLP procedure. Groundwater samples would be collected only at those locations where the cadmium concentration in the TCLP extract exceeded the standard for characteristic hazardous waste. It was

noted that this procedure was consistent with the TACO regulations. Agency comments were received on February 8,, 2006 and these comments will be discussed at a meeting to be held on March 8, 2006. However, it was agreed that creek bottom soils in CS-E at Transect T16 will be excavated to remove material containing dieldrin that could possibly leach to groundwater at concentrations in excess of Illinois Class I groundwater standards. Similarly, it was agreed that a confirmation sample will be taken in CS-D at Transect T6 to verify that soils containing dieldrin have been removed.

- Drawings were submitted and discussed on January 11th, 2006 showing the utilities in the immediate vicinity of the disposal areas, together with the limits of waste boundaries. During this January 11th meeting, it was agreed that the historical aerial photographs prepared by a testifying expert engaged by the Department of Justice (DOJ) would be reviewed to confirm the waste boundaries.

Attachments

There are no Technical Memoranda or data submitted with this report.

Work Scheduled for Next Reporting Period

Prepare for a meeting with the agencies on March 8, 2006 and continue to develop a revised EE/CA report.

Submittal Status

The following reports and evaluations are scheduled to be submitted to the Agency prior to, or during, the next EE/CA meeting on March 8, 2006:

- An additional evaluation of potential areas of principal threat material in the disposal sites. This evaluation will begin as soon as the complete OSC report for the removal action at Site G is received from the Agency.
- Revised utility drawings showing the limits of waste placement in the various disposal areas, as revised by review of the DOJ aerial photographs, and showing the sewer mains that run under Queeny Avenue and Falling Springs Road in the vicinity of the disposal sites.
- A Work Plan for clearing the obstruction from BR-I and for potential DNAPL recovery from this well.
- A Sampling and Analysis Plan for soil vapor investigations at the locations of four buildings in the vicinity of Sites I and G.